

**BY ORDER OF THE COMMANDER
AIR EDUCATION AND TRAINING
COMMAND**

AETC INSTRUCTION 36-2220

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Personnel

ACADEMIC TRAINING

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AETC 36-22, *Military Training*. It provides procedures and responsibilities for academic training and applies to all flying training personnel. This publication applies to all undergraduate and graduate flying training wings and members of the Air National Guard (ANG) who conduct flying training. It does not apply to Air Force Reserve Command units. Subordinate units may supplement this instruction. Units will forward supplements to HQ AETC/DOZ; ANG flying training units (FTU) will forward local supplements to ANG/DO. ANG/DO is the waiver authority for this instruction for ANG FTUs. Copies of ANG-approval waivers will be forwarded to HQ AETC/DOZ. Submit an AF Form 847, **Recommendation for Change of Publication**, to HQ AETC/DOZ to recommend changes, make suggestions, or to identify any conflicts between this and other publications. If a conflict exists between this instruction and a contract, the contract takes precedence. Maintain and dispose of records created as a result of prescribed processes in accordance with AFMAN 37-139, *Records Disposition Schedule* (will become AFMAN 33-322, Volume 4). See Attachment 1 for a glossary of references and supporting information used in this publication.

SUMMARY OF REVISIONS

This revision updates guidance for initial undergraduate training course certification (paragraph 1.2) and subsequent certification (paragraph 1.3); prescribes AETC Form 620E for documenting academic instructor performance (paragraph 1.2); adds guidance on graduate training certification (paragraph 1.4); updates currency requirements (paragraph 7.1.4); prescribes the use of AETC Form 26B for answering test questions (paragraph 5.1); updates listing of qualifying academic instructor courses (Attachment 2); and updates office symbols throughout publication.

NOTE: Issues related to Undergraduate or undergraduate flying training (UFT) apply only to joint specialized undergraduate navigator training (JSUNT) and joint specialized undergraduate pilot training (JSUPT).

1. Qualification. The following lists minimum requirements for academic instructor (AI) qualification. Record all training on AF Form 4061, **Record of Training**, or equivalent, and maintain it in the AI

record, instructor qualification and training record, or according to the contract.

★1.1. AI Requirements. AIs must complete an approved academic instructor course (AIC) before instructing. Attachment 2 contains a representative list of preapproved courses. The HQ AETC/DOZ deputy chief must approve other courses including contractor or locally developed AI checkout programs. Document the training according to paragraph 8.1.

1.2. Undergraduate Training Certification:

★1.2.1. Initial Undergraduate Training Course Certification. The upgrading AI will review all computer-assisted instruction (CAI) lessons and must observe a qualified AI teach each lesson. Additionally, a qualified AI certified in the subject must monitor the upgrading AI the first time the upgrading AI instructs each lesson, including the examination and critique. Document the upgrading AI's performance during initial and subsequent certifications on AETC Form 620, **Academic Instructor Monitoring Checklist**, or AETC Form 620E, **T25 Academic Instructor Monitoring Checklist**.

★1.2.2. Subsequent Undergraduate Training Course Certification. To upgrade in additional courses, AIs must observe the entire course (classes and CAI), except the examination and critique. The Air Force representative determines the monitoring required depending on the instructor's background, course complexity, and performance during initial course certification. For Euro-NATO joint jet pilot training (ENJJPT), AIs certified in a UFT course may teach similar pilot instructor training (PIT) courses.

★1.3. Graduate Training Certification. The upgrading AI will review relevant CAI lessons and classroom training materials. Additionally, the upgrading AI, while monitored by a qualified AI, will perform and instruct in a representative cross section of syllabus lessons using the training media for which he or she requires certification in. The upgrading AI must demonstrate application and knowledge of the procedures, including local area procedures, safety precautions, emergency procedures, aircraft systems, syllabus, etc. Document the upgrading AI's performance during initial and subsequent certifications on AETC Form 620.

2. Scheduling Training. Schedule students within the crew duty day restrictions. UFT students (fixed-wing pilots and navigators) will not receive more than 6 hours per day of testable classroom and/or CAI academic subjects. Other AETC courses may be taught up to 8 hours per day.

2.1. For UFT only, prepare weekly schedules on AETC Form 85, **UPT Academic Scheduling**, or a locally produced equivalent. Units may use a consolidated academic, simulator, and flying schedule if all report and release times for the flight line, academic training, and ancillary training, such as commanders calls and physical training, are included. Designate optional classes on the schedule. The completed AETC Form 85 may be reduced before reproduction. Maintain schedules, including changes, for 1 year.

2.2. Training is normally conducted Monday through Friday. When training is delayed because of factors beyond the control of training personnel, such as extended periods of inclement weather, schedule instruction on weekends to meet course objectives and scheduled graduation dates.

★2.3. For UFT only, if CAI is not operating, reschedule the lessons to maximize the use of CAI. The

Air Force representative may approve classroom presentation of CAI lessons on a one-time basis if the contract permits. Instructors must know their subject well enough to instruct CAI lessons, but need not prepare formal lesson plans. HQ AETC/DOZ does not publish instructor guides for CAI lessons. **NOTE:** The base time-related instruction management (TRIM) manager or equivalent must notify HQ AETC/DOZ in writing within 5 workdays after teaching CAI lessons in the classroom. The notification must include the date of occurrence, student class or section, course hours, and reason for classroom instruction. Repeated use of classroom presentations instead of CAI lessons requires an approved waiver from HQ AETC/DOZ.

3. Absentee Records. Record student absences on AETC Form 563, **Absentee Report (Flying/Space Training)**, or local equivalent. Do not complete this form if a computer system such as TRIM is available or if all students are present. Keep these records for administrative purposes and destroy after class graduation.

4. Inspection of Academic Training. Inspect academic activities with a minimum interruption to training. AIs will continue their presentation and will not report to the inspector. Do not call students to attention. Evaluators or inspectors should enter the classroom before the class begins or during breaks. Explain these procedures to visiting personnel.

★5. Examinations. For UFT only, HQ AETC/DOZ is responsible for flying training academic course examinations. The minimum passing score is 85 percent unless noted otherwise. A course-qualified AI will administer all examinations. During examinations, instructors will only answer questions to clarify the meaning of questions or answers. Instructors should avoid answering in a manner that changes students' confidence in an answer or directs a path for problem resolution. Anything said to one student should be shared with the entire class.

★5.1. AETC Form 26, **Standard Answer Sheet (50 Items)**, AETC Form 26A, **Standard Answer Sheet (100 items)**, or AETC Form 26B, **Standard Answer Sheet (200 items)**, may be used to answer test questions.

5.2. Record examination results on AETC Form 115, **Recapitulation of Examination Results (50 Items)**, or local equivalent. Maintain forms for 6 months after class graduation. Evaluate and grade students of flying training courses to:

5.2.1. Tell them how well they have achieved the learning objectives.

5.2.2. Identify outstanding performance for special recognition and poor performance for special assistance or additional training.

5.2.3. Identify students who fail to meet the standards required for satisfactory completion of the course.

5.2.4. Provide data for analysis and improvement of various aspects of the training program.

5.3. Appoint an examination control monitor to manage examinations. Store examinations, answer sheets, answer keys, floppy disks, and item analyses in a locked metal file cabinet or safe. **EXCEPTION:** Examinations on CAI will have appropriate password security procedures and need not comply with the above requirements.

5.3.1. The examination control monitor will ensure all materials, including test and item analyses, are always secure from unauthorized viewing and will maintain a list of personnel authorized to remove examinations.

5.3.2. Personnel will document examination removals on AETC Form 157, **Examination Control Log**. Each examination will have a separate AETC Form 157. Instructors will record the date and time, number sequence of examinations, name of person removing the examination, and reason for removal on AETC Form 157. Destroy the form 6 months after the last entry.

5.3.3. The examination control monitor will conduct an inventory of examinations every 6 months or whenever an examination compromise is suspected. Notify HQ AETC/DOZ immediately when an examination is compromised.

5.3.4. Destroy examinations when materials become obsolete, surplus, damaged, or illegible. Record this action on AETC Form 157.

6. Reporting Procedures:

6.1. UFT Only. The base TRIM manager loads test files on tape, completes an AF Form 12, **Accountable Container Receipt**, and sends the package by registered mail to HQ AETC/DOZQ, 1150 5th St East, Ste 2, Randolph AFB TX 78150-4404, within the first 5 days of each month. Complete AETC Form 611, **Test Analysis**, when analyses are not available because of extended computer downtime. Store answer sheets and PCN UE024-310B31, Academic Test Roster (if available). Destroy 6 months after class graduation and record disposal on AETC Form 157. The reporting requirement in this paragraph is exempt from licensing in accordance with AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public, and Interagency Air Force Information Collections*.

6.2. Statistical Analysis. AIs should complete a statistical item analysis for course examinations. AFMAN 36-2236, *Guidebook for Air Force Instructors*, describes analysis methods.

6.3. AETC Form 687, Ground Training Critique. Submit this form to suggest course or examination changes. When critiques refer to specific examination questions or answers, use registered mail and AF Form 12, courier, or a secure electronic device. Do not change examination content, discard questions, or do anything to affect the results of the examination without approval from HQ AETC/DOZ. If contact cannot be made in a reasonable time, the Air Force site representative may delete a question made obsolete because of changes to a technical order, aeronautical publication, or Air Force publication. HQ AETC/DOZ will respond to the submitting unit within 15 working days on the status of AETC Form 687. (**EXCEPTION:** The 325 TRS will use AETC Form 668, **Test Data**. 325 TRS/TD is the change approval authority for courseware.)

7. Quality Academic Instructor (QAI) Program. Commanders or site managers will implement a QAI program that includes continuation training meetings, monitoring and evaluating AIs, maintaining AI currency, and student critiques.

7.1. Supervisors will be involved in all phases of the QAI program and accomplish the following:

7.1.1. Monitor and evaluate AIs to ensure a quality instructor force. The commander or site manager

determines the timing and recurrence of these evaluations. Document evaluations conducted by the operations group, squadron standardization/evaluation, or quality assurance evaluators (QAE) or quality assurance representatives (QAR) on AETC Form 620, 620E, or local equivalent monitoring and evaluation checklists.

7.1.2. Schedule academic continuation training meetings periodically to ensure quality instruction. Discuss both administrative topics and instruction techniques. Emphasize specific academic topics such as proper questioning techniques, increasing student involvement, improving transitions and interim summaries, presenting ideas for attention and motivation steps, exchanging AI innovations, and improving communication skills.

7.1.3. Conduct student critiques at the end of each course. Initiate a method to consolidate and track responses and actions resulting from valid student inputs. Track critique trends from class to class to initiate and validate improvements.

★7.1.4. Ensure instructors maintain currency by instructing a nonadministrative lesson at least once every 120 days. Commanders will determine requirements to regain currency if more than 120 days elapse.

7.2. QAEs/QARs who oversee academic training will have a thorough knowledge of contractual requirements and academic training methods. Documentation of activity and interaction with the contractor is necessary for contract management. QAEs/QARs should:

7.2.1. Document all contractor deficiencies and ensure they are corrected in a timely manner.

7.2.2. Review the contract periodically to recognize contractor requirements during evaluations and day-to-day interaction.

7.2.3. Develop a quality assurance surveillance plan (QASP) to cover all performance requirements in the contract.

7.2.4. Conduct effective surveillance to include all contractor work hours.

7.2.5. Attend QAE/QAR training within 90 days of assuming duties.

7.2.6. Attend AIC training within 120 days of assuming duties. AIC training is required prior to conducting surveillance.

7.3. AIs will accomplish the following:

7.3.1. Personalize the instructor guide (IG) to develop a complete lesson plan and ensure a smooth presentation. AIs will present all information in the IG unless specifically identified as optional. AIs may only adjust the sequence of topics in the IG.

7.3.2. Ask questions during lessons to ensure student alertness, increase retention of information, and provide student progress feedback. Academic instruction is a student-centered presentation using varied questioning techniques to ensure student involvement.

8. AI Documentation. When feasible, document using prescribed AETC forms. Maintain AI qualification and training documentation in a six-part folder, or local equivalent, as follows:

8.1. Section 1—inprocessing checklist and AIC completion memorandum or certificate.

8.2. Section 2—initial course checkout documentation.

8.3. Sections 3 and 4—subsequent course documentation.

8.4. Section 5—monitoring and evaluation documentation.

8.5. Section 6—currency documentation.

NOTE: AI documentation may be kept in the AI's qualification and training record.

9. Forms Prescribed. AETC Forms 26, 26A, 26B, 85, 115, 157, 563, 611, 620, 620E, and 687.

10. Forms Adopted. AF Forms 12, 847, and 4061; AETC Form 668.

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2 Attachments

1. Glossary of References and Supporting Information
2. Representative List of Preapproved AI Courses

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 33-324, *The Information Collections and Reports Management Program; Controlling Internal, Public and Interagency Air Force Information Collections*
AFPD 36-22, *Military Training*
AFMAN 36-2236, *Guidebook for Air Force Instructors*
AFMAN 37-139, *Records Disposition Schedule* (will become AFMAN 33-322, Volume 4)

Abbreviations and Acronyms

AI—academic instructor
AIC—academic instructor course
ANG—Air National Guard
CAI—computer-assisted instruction
ENJJPT—Euro-NATO joint jet pilot training
IG—instructor guide
PIT—pilot instructor training
QAE—quality assurance evaluator
QAI—quality academic instructor
QAR—quality assurance representative
QASP—quality assurance surveillance plan
UFT—undergraduate flying training

Attachment 2**REPRESENTATIVE LIST OF PREAPPROVED AI COURSES**

Principles of Instruction (3AIR3S200-002)

Basic Instructor Course (*3AIR3S200-075)

Principles of Instruction (J3AIZ3S200-001)

Basic Instructor Course (E4AIT3S200-087)

AMC Instructor Qualification Course (AMCIQC)

Instructor Orientation Course (YPMEC)

Academic Instructor Course (MAIS001)

Academic Instructor Development Training Course (AIC00AT)

Flight Instructor Preparatory Course (AETC Syllabus FIP, or 1P1)

Battle Management Instructor Training (AETC Syllabus Z-IBMT-BMS-TN or Z-IBMT-BMS-PP)